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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/778,255

02/07/2001

Klaus Gaedke

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6369

7590

04/07/2004

Joseph S. Tripoli
Patent Operations
Thomson Multimedia Licensing, Inc.
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EXAMINER

REKSTAD, ERICK J

ART UNIT

PAPER NUMBER

2613

DATE MAILED: 04/07/2004

3

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/778,255

Applicant(s)

GAEDKE ET AL.

Examiner

Erick Rekstad

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by US Patent 5,079,630 to Golin et al.

[claims 1 and 6]

As shown in Figures 1, 2 and 13, Golin teaches the method and apparatus for bitrate control containing an encoded-data buffer (232, Fig. 2), wherein the encoded output video or audio data pass through said encoded-data buffer and an input buffer (1350, Fig.13) of a data recorder and are thereafter stored on a storage medium operated in said data recorder (20), the method including the steps:

Using a first control signal (S10) representing the current filling level of said encoded-data buffer to control the video or audio encoder output bitrate by corresponding adaptation of at least one encoding parameter used in said video or audio encoder (232, S10, 234, 238, S11, Fig. 2) (Col 9 lines 54-67, Col 10 lines 1-8, Col 11 Lines 17-36, Col 27 Lines 1-5, Fig. 39).

Controlling additionally said encoding parameter and/or further encoding parameters influencing said video or audio encoder output bitrate by a second control signal representing the current filling level of said input buffer and/or by a third control

signal representing a currently available storage capacity on said storage medium (Col 36 Lines 14-21, Col 37 Lines 1-9).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Golin et al as applied to claims 1 and 6 above, and further in view of US Patent 5,381,275 to Nitta et al.

[claims 4 and 9]

Golin teaches the method and apparatus to adjust the encoding process based on the bitrate of buffers, as shown above. Golin teaches the encoding loop containing a quantiser (1630, Fig. 16). Golin teaches the adjusting of the quantiser, indirectly, based on the encoding parameter. By using the encoding parameter to adjust the region area the quantisation is changed (Fig. 39, 44, 45, Col 11 Lines 36-58, Col 12 Lines 8-25). Golin does not teach adjusting the quantiser based on the encoding parameter directly. Nitta teaches the adjusting of the quantiser (4) using an encoding parameter (QUANTIZ. WIDTH) in order to adjust the bitrate to allow the recording of the data within the remaining space on the disk (Col 3 Lines 29-58, Fig. 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the adaptive video compression system of Golin with the quantiser adjustment method of Nitta in order to

provide a means to adjust the compression of the data so that it can be stored on the remaining space of a disk.

Claims 2, 3, 7, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Golin et al as applied to claim 1 above, and further in view of US Patent 6,584,272 to Fokushima et al.

[claims 2 and 7]

Golin teaches encoder with the characteristics of an mpeg encoder (Intra/Inter frames, quantiser, variable length coder, Fig. 16) but does not state the encoder is MPEG. Fokushima teaches a data recording apparatus using MPEG2 in order to provide long-hour recording on a disc-type recording medium (Col 1 Lines 17-21). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the recording system of Golin with the MPEG encoder of Fokushima in order to provide long-hour recording on a disc-type recording medium.

[claims 3 and 8]

Golin teaches the system recording on a CD-ROM but suggests the use of other optical storage media (Col 34 Lines 14-19). Golin does not specifically teach the recording on a DVD. Fokushima teaches the recording on a DVD_RAM or similar disc serving as a recording medium (Col 1 Lines 15-22, Col 2 Lines 1-2). It would have been obvious to one of ordinary skill in the art at the time of the invention to replace the CD_ROM of Golin with the DVD_RAM of Fokushima as they are similar disc recording medium.

Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Golin as applied to claim 1 above, in view of Fukushima et al and further in view of US Patent 5,661,526 to Hamamoto et al.

[claims 5 and 10]

Golin teaches the method and apparatus for bitrate control in a video or audio encoder as shown for claim 1. Golin does not teach the data stream input to said video or audio encoder including –e.g. EPG data- concerning the temporal length or data concerning the amount of data for a program to be recorded, from which, based on the initial or currently remaining program length and a desired average data rate, and based on the initial or currently remaining storage capacity for this program on said storage medium, the at least one encoding parameter is calculated accordingly using said second control signal and/ or said third control signal. Fukushima teaches the method of determining the remaining amount of space on a disk and adjusting the encoding process in order to fit a desired amount of broadcast video on the disk (Col 2 Lines 21-29 and 36-43, Col 7-11, 59-64, Col 7 Lines 5-17, Figs. 1, 3, 4, and 6). Fukushima does not teach the obtaining the length of recording from the broadcast video stream. Hamamoto teaches a tape recorder that extracts the program continuation time from a broadcast signal, which carries program time information, in order to compare the remaining recording time available with the program continuation time and adjust the recording speed appropriately (Col 3 Lines 49-60, Fig. 10). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the system of Golin with the method of Fukushima in order to adjust the recording of a broadcast

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video stream based on available disc space. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the system of Golin and Fukushima with the program time detection of Hamamoto in order to obtain the time of the program automatically and adjust the recording based on the remaining time and available disc space.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erick Rekstad whose telephone number is 703-305-5543. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 703-305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Erick Rekstad
Examiner
AU 2613

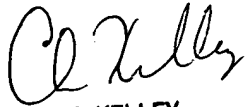
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